RESEARCH SCIENTISTS RECEIVE RECOGNITION

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Payoff

The Engineering and Science Awards, presented by the Engineering and Science Foundation/Affiliates Societies Council of Dayton, acknowledged the role of research and development within the Air Force's broad technology spectrum. The 1997 awards recognized the leadership and research in materials and materials processes performed by Dr. James C. Malas III and Dr. Dennis M. Dimiduk of the Materials and Manufacturing Directorate.

Accomplishment

The Engineering and Science Awards, presented annually by the Engineering and Science Foundation/Affiliates Societies Council of Dayton OH, honor outstanding Dayton area engineers and scientists for significant achievements in their professions. Dr. Dennis M. Dimiduk and Dr. James C. Malas III were among the 1997 winners recognized for technical leadership and scientific achievement.

Background

Dr. Dimiduk was recognized for research in advanced metals and intermetallic alloys. His contributions in understanding and controlling the properties of gamma titanium-aluminide alloys as high temperature structural materials has led to the development of an entirely new class of alloys offering revolutionary prospects for weight reduction in turbine engines. Dr. Dimiduk's promising research efforts have had a major impact on the development of advanced aerospace systems and advanced aircraft engines, such as the F119. Dr. Malas was recognized for achievements in applying materials processing science technology to the design and analysis of advanced airframe structures and turbine engine components, and to the transfer of manufacturing related technologies to industry. He spearheaded a major in-house research activity that developed new systematic approaches to solving material processing problems involving computer simulation and optimization methods. Dr. Malas' research has also benefited commercial industries. For example, his expertise in transferring materials processing technology to aluminum extrusion and die-making companies near Youngstown OH, resulted in a 40 percent reduction in their start-up scrap material and trimmed extrusion costs by 25 percent.